JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
END TERM TEST
SUMMER SEMESTER - JUNE 2016
B.Tech/ IV Semester

COURSE CODE: 10B11EC401   MAX. MARKS: 50
COURSE NAME: DIGITAL ELECTRONICS
COURSE CREDITS: 3   MAX. TIME: 2 Hrs

Note: *All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.*

1. Convert JK flip flop to SR flip flop. [7 Marks]

2. Differentiate between Ring counter and Johnson counter. [6 Marks]

3. Design a 4 bit BCD synchronous counter. [7 Marks]

4. With help of a suitable diagram explain the working of 555 timer as an astable multivibrator. [7 Marks]

5. Explain the working of a bidirectional shift register with the help of suitable diagram. [8 Marks]

6. How does TTL NAND gate work? Explain with the help of suitable diagram. [7 Marks]

7. Design a counter using JK flip flop that goes through a repeated sequence as 0,3,5,7,9,12,13. [8 marks]

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